

# ROSS POINT WATER DISTRICT (PWS 1280163) SOURCE WATER ASSESSMENT REPORT

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May 16, 2001



## State of Idaho Department of Environmental Quality

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## Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the act. This assessment is based on a land use inventory of the designated assessment area, sensitivity factors associated with the wells, and aquifer characteristics.

This report, *Source Water Assessment for Ross Point Water District (PWS 1280163)*, describes the public drinking water system, the boundaries of the zones of water contribution, and the associated potential contaminant sources located within these boundaries. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. **The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The Ross Point Water District drinking water system consists of four wells. The wells are located on Syringa, Primrose, 20<sup>th</sup> Street and Horsehaven (High School Well) in Post Falls, Idaho. Water samples are taken from each of the wells individually and from various locations within the distribution system. The water system monitors each well annually for nitrates, every nine years for nitrites, and every three years for lead and copper. The water system is not required to monitor the 20<sup>th</sup> Street well for any further contaminants. Monitoring waivers have been obtained for volatile organic and synthetic organic chemical monitoring for the remaining wells. Those wells are also monitored every three years for inorganic chemicals. None of the wells are experiencing significant water quality issues.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

Ross Point Water District should focus source water protection activities on implementation of practices aimed maintaining the quality of the drinking water in their system. Most of the designated source water assessment areas for the wells fall under the jurisdiction of the City of Post Falls or Kootenai County. Partnerships with state and local agencies and industry groups should be established and are critical to success. Due to the time involved with the movement of ground water, source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term.

A community with a fully developed source water protection program will incorporate many strategies. For assistance in developing protection strategies, please contact your regional Idaho Department of Environmental Quality office or the Idaho Rural Water Association.

# SOURCE WATER ASSESSMENT FOR ROSS POINT WATER DISTRICT

## Section 1. Introduction- Basis for Assessment

The following sections contain information necessary to understand how and why this assessment was conducted. **It is important to review this information to understand what the ranking of this source means.** A map showing the delineated source water assessment area and the inventory of significant potential sources of contamination identified within that area are attached.

### Level of Accuracy and Purpose of the Assessment

The Idaho Department of Environmental Quality (DEQ) is required by the U.S. Environmental Protection Agency (EPA) to assess the over 2,900 public drinking water sources in Idaho for their relative susceptibility to contaminants regulated by the Safe Drinking Water Act. This assessment is based on a land use inventory of the delineated assessment area, sensitivity factors associated with the wells, and aquifer characteristics. All assessments must be completed by May of 2003. The resources and time available to accomplish assessments are limited. Therefore, an in-depth, site-specific investigation to identify each significant potential source of contamination for every public water system is not possible. **This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this source. The results should not be used as an absolute measure of risk and they should not be used to undermine public confidence in the water system.**

The ultimate goal of this assessment is to provide data to local communities to develop a protection strategy for their drinking water supply system. The Idaho Department of Environmental Quality (DEQ) recognizes that pollution prevention activities generally require less time and money to implement than treating a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a source water protection program should be determined by the local community based on its own needs and limitations. Wellhead or source water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

## **Section 2. Conducting the Assessment**

### **General Description of the Source Water Quality**

Ross Point Water District serves approximately 3000 people in multiple service areas in and near the City of Post Falls, Idaho (Figure 1). The Ross Point Water District public drinking water system is comprised of four wells.

In recent years wells in the Ross Point Water District drinking water system have not seen any significant historical water quality problems. Occasionally, water samples taken from the wells (except for the 20<sup>th</sup> Street Well, which has revealed no chemical contamination) have revealed low levels of chemical contaminants. The water system does not treat its water, as treatment is not needed. A back-up chlorination system is in place, should one become necessary.

#### Syringa Well

A sample taken from the Syringa well on 6/24/98 revealed barium at .03mg/L (maximum contaminant level 2.0mg/L), cadmium at .002mg/L (maximum contaminant level .005mg/L) and chromium at .02mg/L (maximum contaminant level .1mg/L). A sample taken from the Syringa well on 1/29/96 revealed chloride at 3.0mg/L. The recommended maximum level for chloride is 250mg/L. On 11/11/95 a water sample from the Syringa Well revealed antimony at .005mg/L which approaches the maximum contaminant level of .006mg/L. In the same sample arsenic was detected at .006mg/L (maximum contaminant level .05mg/L) and fluoride was detected at .06mg/L (maximum contaminant level 4.0mg/L). On 5/6/93 fluoride was detected in a sample at .13mg/L. The highest concentration of nitrates in water from the Syringa Well has been 4.4mg/L on 1/29/96. The maximum allowable level of nitrates is 10.0mg/L.

Water samples taken from the Syringa Well were positive for the presence of total coliform bacteria on 2/3/98 and 12/1/95.

#### Primrose Well

Barium was detected at .02mg/L on 6/24/98 in the Primrose Well. On 1/29/96 chloride was measured at 2.5mg/L. A sample taken from the Primrose Well on 11/11/95 revealed the presence of selenium at .011mg/L, below the maximum contaminant level of .05mg/L. That same sample contained fluoride at .06mg/L. On 6/30/89 a water sample revealed arsenic at .007mg/L.

#### 20<sup>th</sup> Street Well

The 20<sup>th</sup> Street well has no recorded levels of inorganic chemicals or other types of contamination.

### High School Well

On 4/20/99 a water sample taken from the High School Well revealed Trichloroethylene at .9µg/L. The maximum contaminant level for this chemical is 5µg/L. Trichloroethylene is commonly associated with discharge from metal degreasing sites and other factories. On the same date water from the High School Well contained arsenic at .009mg/L, barium at .12mg/L, chromium at .01mg/L and fluoride at .2mg/L. This sample also revealed iron levels in the well water to be 3.30mg/L and manganese at .47mg/L. The recommended maximum level for iron is .30mg/L, while the recommended maximum level of manganese in drinking water is .05mg/L. Iron and manganese are not regulated contaminants, but may impart taste, color and odor to drinking water.

None of the regulated contaminants detected in any of the wells have exceeded maximum contaminant levels.

Lead and copper testing completed for the water system have revealed both to be at acceptable levels.

### **Defining the Zones of Contribution- Delineation**

The delineation process establishes the physical area around a well that will become the focal point of the assessment. The process includes mapping the boundaries of the zone of contribution into time of travel zones (zones indicating the number of years necessary for a particle of water to reach a well) for water in the aquifer.

DEQ used a refined computer model approved by the EPA in determining the three-year (Zone 1B), six-year (Zone 2), and ten-year (Zone 3) times-of-travel (TOT) for water associated with the Rathdrum Prairie aquifer in the vicinity of Post Falls, Idaho. The computer model used site specific data, assimilated by DEQ from a variety of sources including the city and other local well logs. The delineated source water assessment areas for wells in the Ross Point Water District system can best be described as slight arcs extending from the wellheads in southeasterly direction. The actual data used by DEQ in determining the source water assessment delineation area are available upon request.

### **Identifying Potential Sources of Contamination**

A potential source of contamination is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act and has a sufficient likelihood of releasing such contaminants at levels that could pose a concern relative to drinking water sources. The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water contamination. The locations of potential sources of contamination within the delineation area were obtained by field surveys conducted by DEQ and from available databases.

The dominant land use in the area surrounding the suburban.

Land use within Post Falls' city limits consists of residential homes, small businesses, and light manufacturing. Homes within Post Falls are connected to a sewer system, while some homes outside of town operate with individual septic systems.

It is important to understand that a release may never occur from a potential source of contamination provided best management practices are used at the facility. Many potential sources of contamination are regulated at the federal level, state level, or both to reduce the risk of release. Therefore, when a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the potential for contamination exists due to the nature of the business, industry, or operation. There are a number of methods that water systems can use to work cooperatively with potential sources of contamination, such as educational visits and inspections of stored materials. Many owners of such facilities may not even be aware that they are located near a public water supply well.

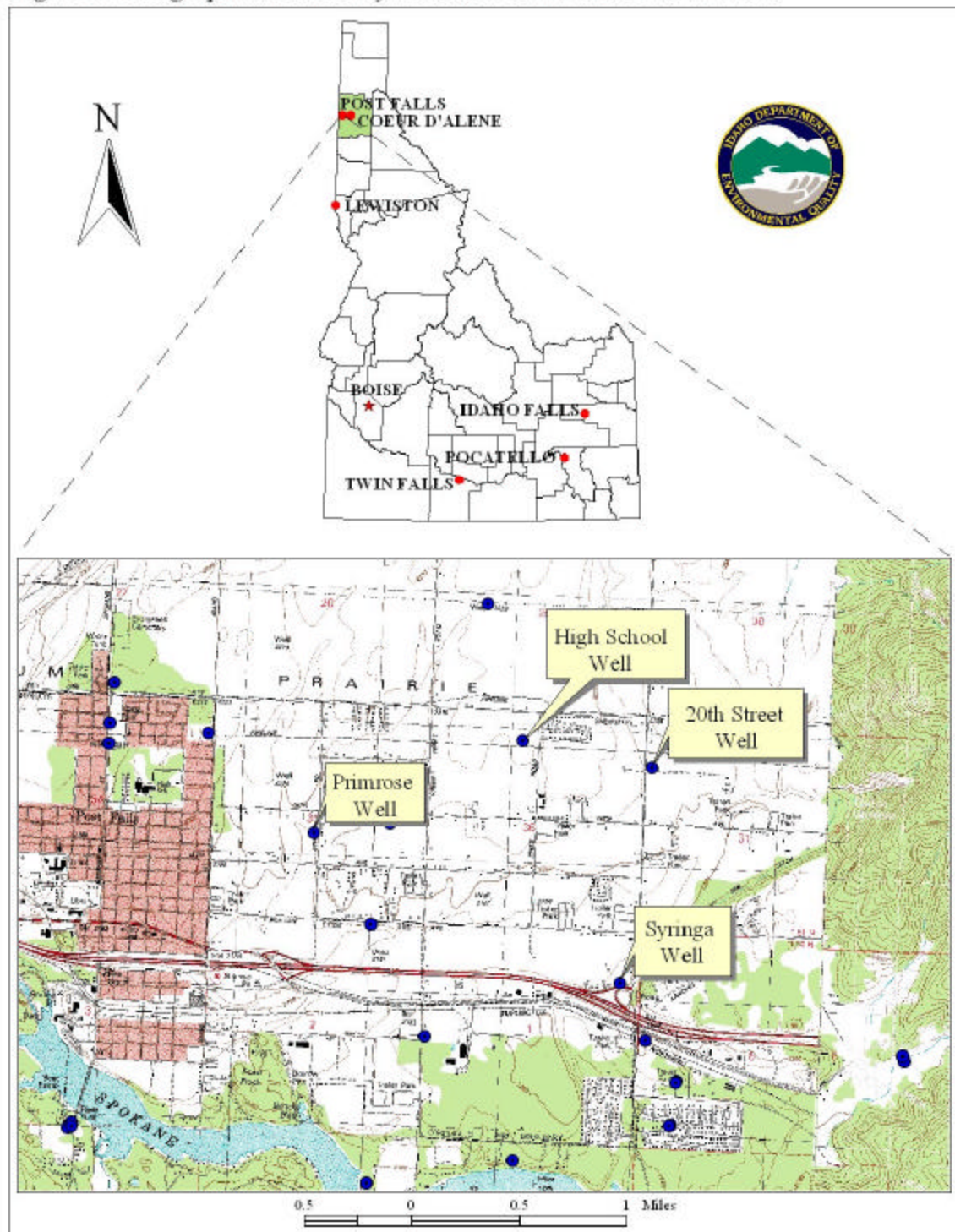
### **Contaminant Source Inventory Process**

A two-phased contaminant inventory of the study area was conducted during February and March of 2001. The first phase involved identifying and documenting potential contaminant sources within the Ross Point Water District source water assessment areas through the use of computer databases and Geographic Information System maps developed by DEQ. The second, or enhanced, phase of the contaminant inventory involved contacting the operator to validate the sources identified in phase one and to add any additional potential sources in the areas.

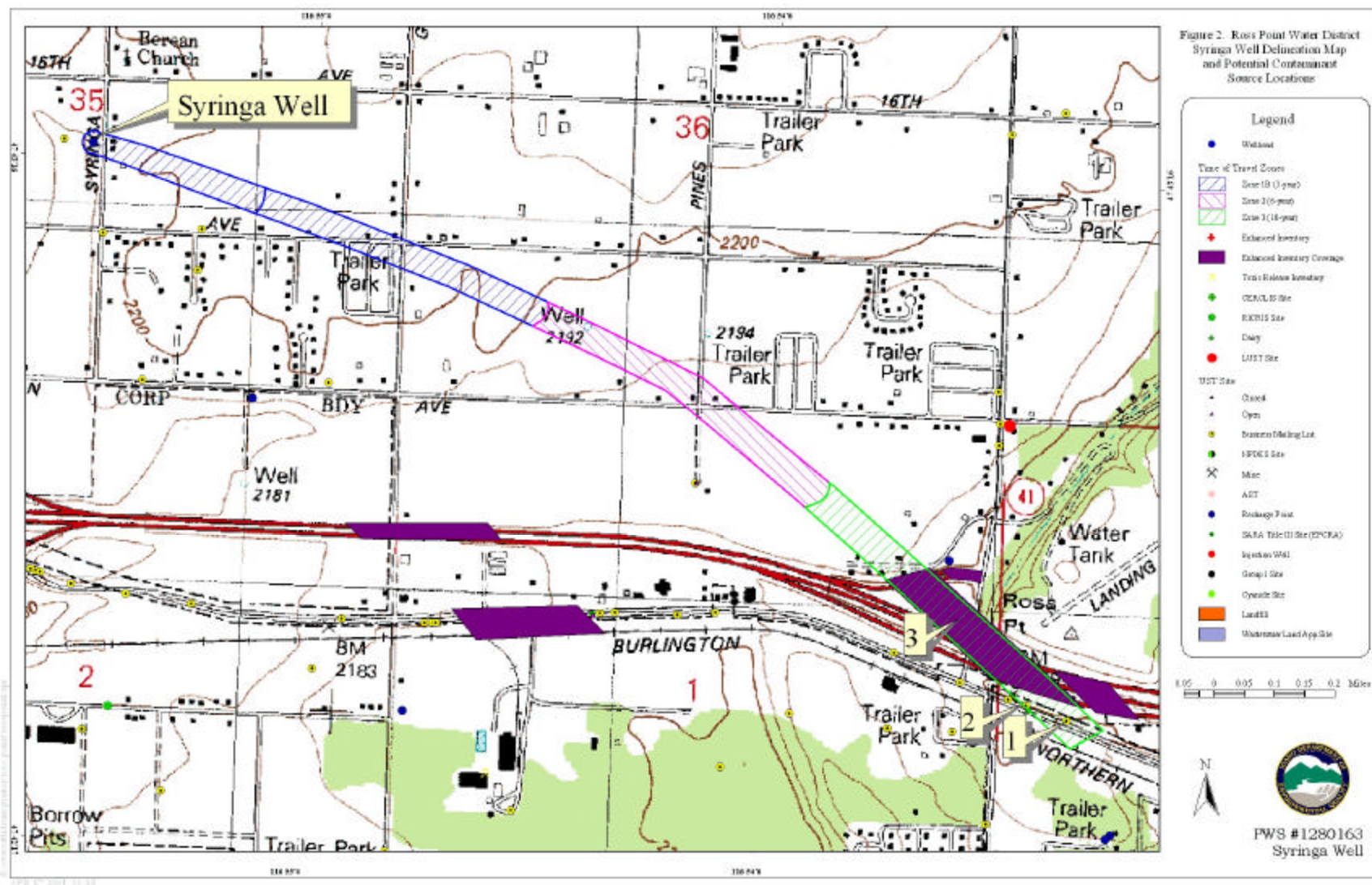
A total of three potential contaminant sites are located within the delineated source water area for the Syringa Well. There are four potential contaminant sites located within the source water assessment area for the Primrose Well. The 20<sup>th</sup> Street and High School Wells have no associated potential contaminant sites (Tables 1-4). Potential contaminant sources located in the delineated source water areas within the City of Post Falls include transportation corridors and small businesses (Figures 2-5).

Contaminants of concern consist of inorganic chemicals, volatile organic chemicals and synthetic organic chemicals. Tables 1-4 list the potential contaminants of concern, time of travel zones, and information source.

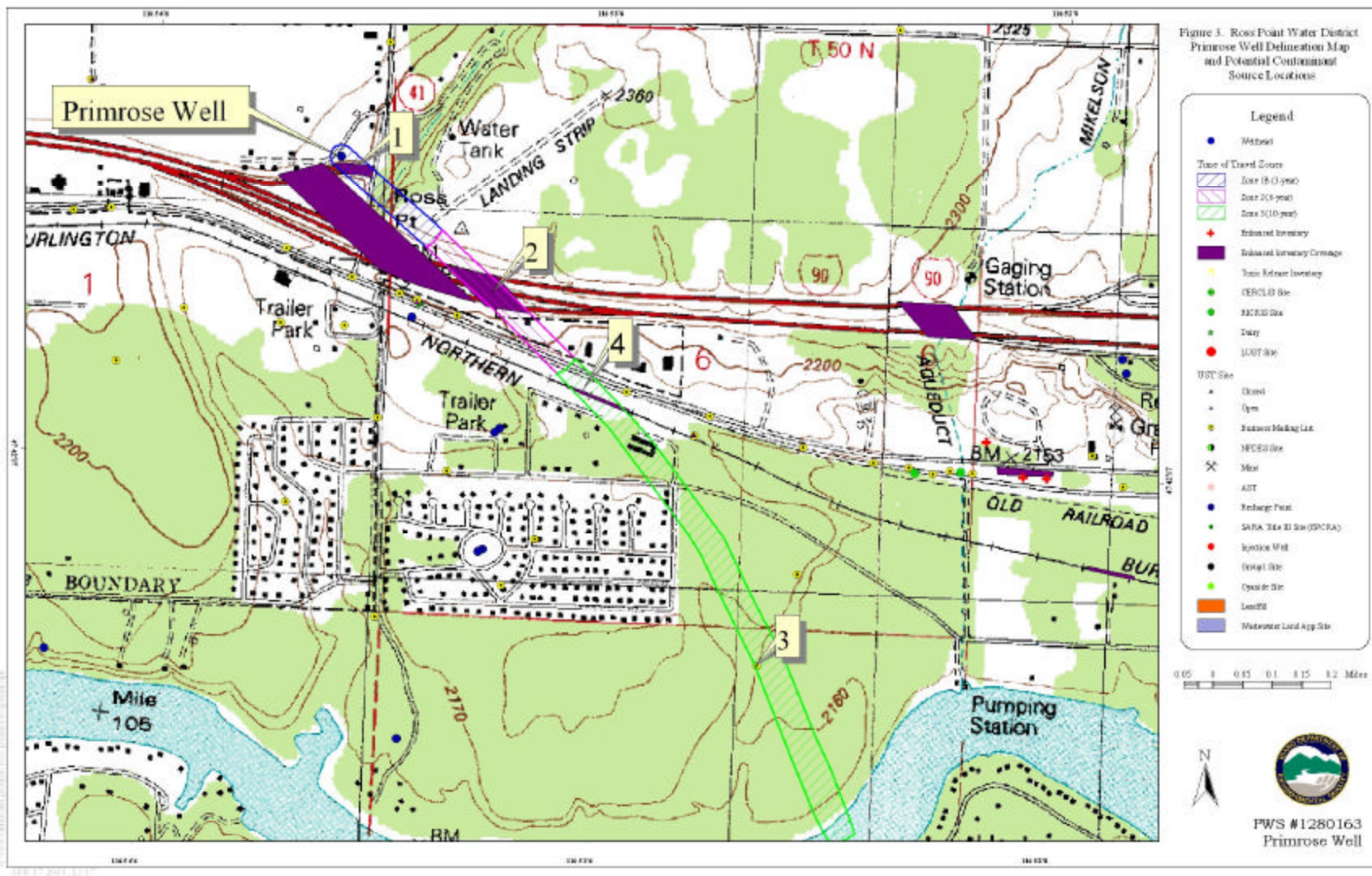
Figure 1. Geographic Location of the Ross Point Water District Wells

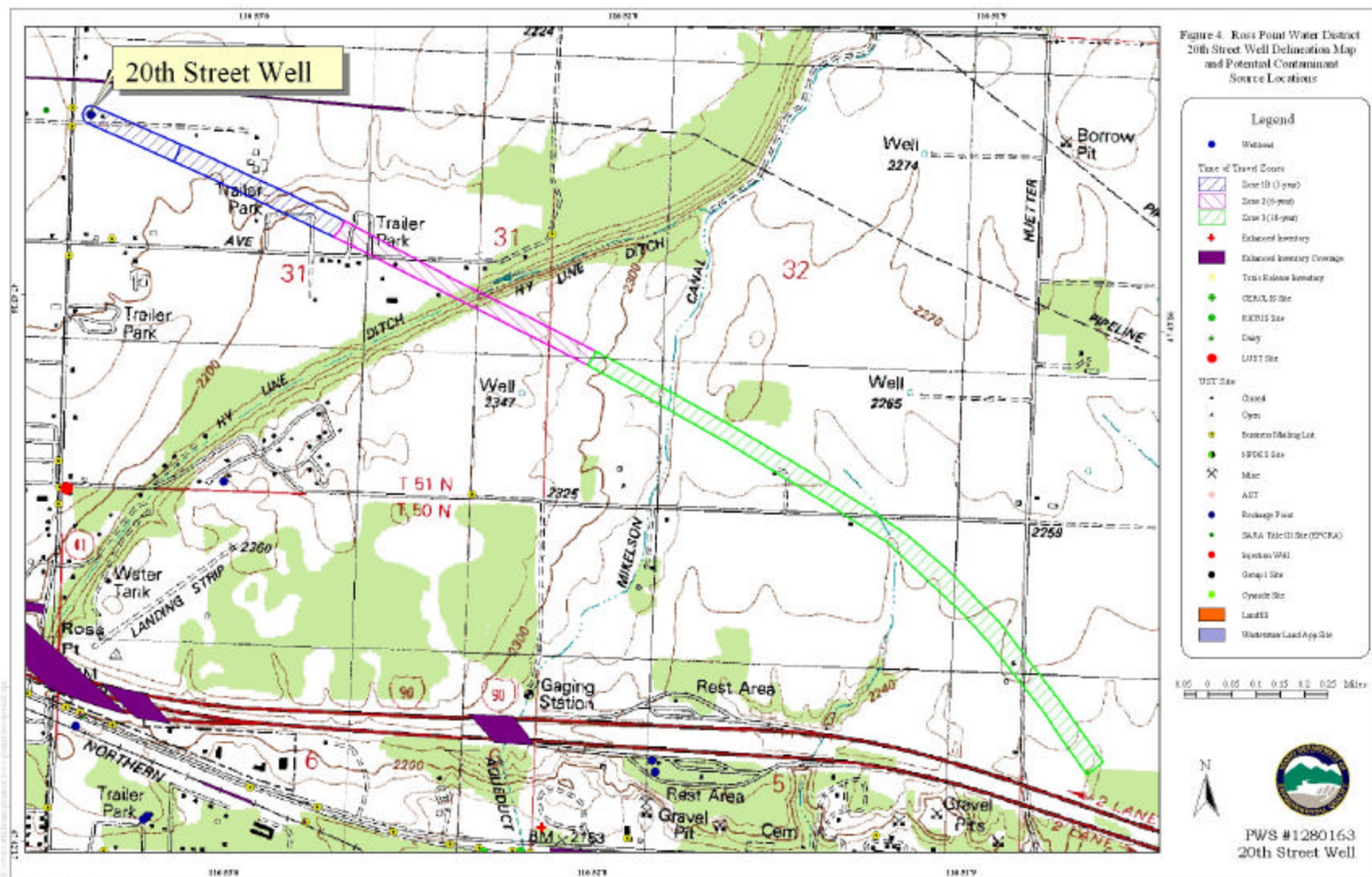




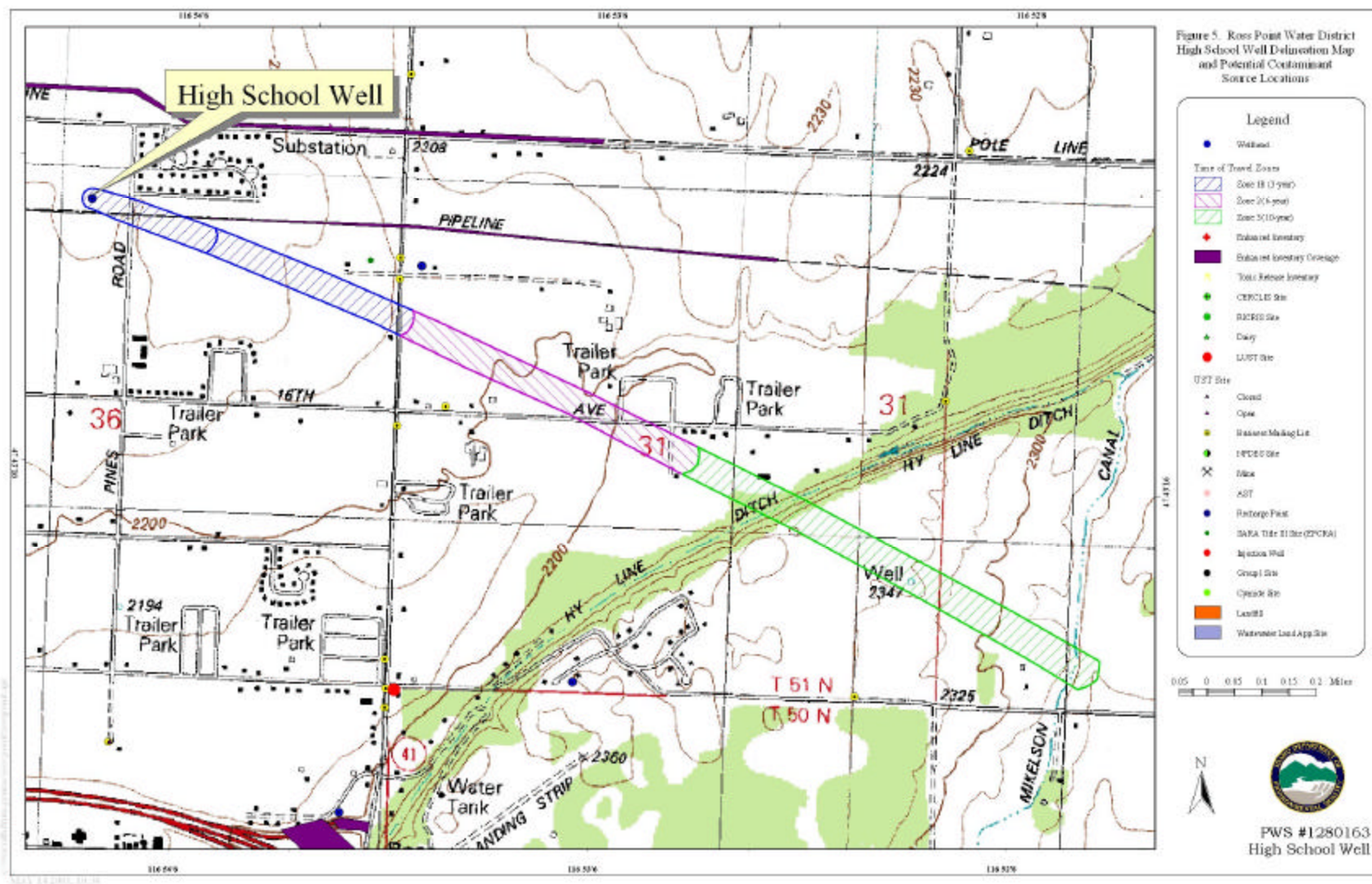












**Table 1. Syringa Well Potential Contaminant Inventory**

SITE #	Source Description	TOT Zone <sup>1</sup> (years)	Source of Information	Potential Contaminants <sup>2</sup>
1	Truck Parts	10	Database Search	VOC, SOC, IOC
2	Truck Repair	10	Database Search	VOC, SOC, IOC
3	I90	10	Database Search	VOC, SOC, IOC

**Table 2. Primrose Well Potential Contaminant Inventory**

SITE #	Source Description <sup>1</sup>	TOT Zone <sup>1</sup> (years)	Source of Information	Potential Contaminants <sup>2</sup>
1	Transportation Corridor	3	Database Search	VOC, SOC, IOC
2	Transportation Corridor	6	Database Search	VOC, SOC, IOC
3	Carpet Cleaners	10	Database Search	VOC
4	Railroad	10	Database Search	VOC, SOC, IOC

**Table 3. 20<sup>th</sup> Street Well Potential Contaminant Inventory**

SITE #	Source Description	TOT Zone (years)	Source of Information	Potential Contaminants
No documented potential contaminant sites.				

**Table 4. High School Well Potential Contaminant Inventory**

SITE #	Source Description	TOT Zone (years)	Source of Information	Potential Contaminants
No documented potential contaminant sites.				

<sup>1</sup>TOT = time of travel (in years) for a potential contaminant to reach the wellhead

<sup>2</sup>IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

### Section 3. Susceptibility Analysis

The susceptibility of the source to contamination was ranked as high, moderate, or low risk according to the following considerations: hydrologic characteristics, physical integrity of the well, land use characteristics, and potentially significant contaminant sources. The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. Therefore, a high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for each well is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. The following summaries describe the rationale for the susceptibility ranking.

#### Hydrologic Sensitivity

The hydrologic sensitivity for all of the Ross Point Water District wells is high. This reflects porous nature of the soils associated with the Rathdrum Prairie aquifer and the lack of significant confining layers retarding the vertical transport of contaminants.

## Well Construction

Well construction directly affects the ability of the wells to protect the aquifer from contaminants. Lower scores imply a system that can better protect the water. The Ross Point Water District drinking water system consists of four wells that extract ground water for domestic and industrial uses. Water extraction from individual wells is monitored by the system operator. The wells' system construction scores are moderate.

The Idaho Department of Water Resources (IDWR) *Well Construction Standards Rules (1993)* require all public water systems (PWSs) to follow DEQ standards as well. IDAPA 58.01.08.550 requires that PWSs follow the *Recommended Standards for Water Works (1997)* during construction. Various aspects of the standards can be assessed from well logs. Table 1 of the *Recommended Standards for Water Works (1997)* states that steel casings with diameters ranging from 14-20" require a thickness of 0.375 inches.

### Syringa Well

This well was drilled in 1973. The Syringa well uses 14" casing that is .375" thick. The casing extends to 238' in the 275' deep well. A 12" diameter screen extends from 237' to 263'. The well's surface seal consisting of puddling clay extends to 206'. The well's sanitary seal is adequate, but the casing is not properly vented.

### Primrose Well

The Primrose Well was drilled in the early 1920's. The well's casing is 24" in diameter and extends to an unknown depth within the 300' deep well. Casing thickness and other construction characteristics for Primrose Well could not be determined due to the absence of a well driller's report for this well. It is unlikely to meet today's standards due to its age. The well's casing is not adequately vented, but the sanitary seal is intact.

### 20<sup>th</sup> Street Well

This well was drilled in 1986. It is 268' deep. The 20<sup>th</sup> Street Well uses 16" casing that is .375" thick. The casing extends to 249' within the well. The well screen is set from 248' to 268'. Puddling clay was used as a surface seal in this well. It extends 40' deep. This well's sanitary seal is also intact, but it is not adequately vented.

### High School Well

The High School Well is the system's newest well. It was drilled in 1999 and has 20" casing that is .375" thick. The casing extends to 260', while the cement surface seal extends to 20'. The well is screened from 260' to 290'. The well has an intact sanitary seal.

All wells have casings that meet minimum requirements. According to the most recent sanitary survey of the wells, completed in September 2000, all of the wellheads are maintained appropriately. All of the wells are located outside of the 100-year floodplain.

## Potential Contaminant Source and Land Use

The wells rated in the low category for all chemical classes and for potential sources of microbial contamination due to the low density of documented potential contaminant sites located within their source water assessment areas.

## Final Susceptibility Ranking

In terms of the total susceptibility score, it can be seen from Table 5 that all of the wells showed moderate overall susceptibility to contamination.

**Table 5. Summary of Ross Point Water District Susceptibility Evaluation**

Well	Susceptibility Scores <sup>1</sup>									
	Hydrologic Sensitivity	Contaminant Inventory				System Construction	Final Susceptibility Ranking			
		IOC	VOC	SOC	Microbials		IOC	VOC	SOC	Microbials
Syringa	H	L	L	L	L	M	M	M	M	M
Primrose	H	L	L	L	L	M	M	M	M	M
20 <sup>th</sup> Street	H	L	L	L	L	M	M	M	M	M
High School	H	L	L	L	L	M	M	M	M	M

<sup>1</sup>H = High Susceptibility, M = Moderate Susceptibility, Low Susceptibility

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

## Susceptibility Summary

The Ross Point Water District drinking water system is currently not threatened by significant potential sources of contamination.

## Section 4. Options for Source Water Protection

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a source receives, protection is always important. Whether the source is currently located in a “pristine” area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

An effective source water protection program is tailored to the particular local source water protection area. A community with a fully developed source water protection program will incorporate many strategies. Ross Point Water District should focus source water protection activities on preserving the quality of their drinking water.



This includes developing a source water protection plan containing, at a minimum, public education and contingency components. The water system should attempt to notify its customers, and local residents, of the location of their drinking water wells and the corresponding source water assessment areas. Consumers should be advised of activities that are not appropriate within a source water assessment area, such as improper disposal of household hazardous waste. Residents using septic systems should be advised of proper septic tank maintenance procedures. The water system's contingency plan should outline the steps to be taken in the event of a drinking water emergency and identify alternative sources of water. Partnerships with state and local agencies and industry groups should be established and are critical to success. Due to the time involved with the movement of ground water, wellhead protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term.

### **Assistance**

Public water supplies and others may call the following IDEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the IDEQ office for preliminary review and comments.

Coeur d'Alene Regional IDEQ Office (208) 769-1422

State IDEQ Office (208) 373-0502

Website: <http://www.deq.state.id.us>

Water suppliers serving fewer than 10,000 persons may contact John Bokor, Idaho Rural Water Association, at 1-800-962-3257 for assistance with wellhead protection strategies.

## References Cited

Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, 1997. "Recommended Standards for Water Works."

Idaho Department of Environmental Quality, 1997. Design Standards for Public Drinking Water Systems. IDAPA 58.01.08.550.01.

Idaho Department of Water Resources, 1993. Administrative Rules of the Idaho Water Resource Board: Well Construction Standards Rules. IDAPA 37.03.09.

# **Attachment A**

## **Ross Point Water District Susceptibility Analyses Worksheets**

The final scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.2)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.35)

Final Susceptibility Scoring:

- 0 - 5 Low Susceptibility
- 6 - 12 Moderate Susceptibility
- > 13 High Susceptibility

1. System Construction		SCORE			
Drill Date	05/02/1973				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES	2000			
Well meets IDWR construction standards	YES	0			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		3			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	OTHER	0	0	0	0
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		0	0	0	0
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	NO	0	0	0	0
(Score = # Sources X 2 ) 8 Points Maximum		0	0	0	0
Sources of Class II or III leachable contaminants or	NO	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B Less Than 25% Agricultural Land		0	0	0	0
Total Potential Contaminant Source / Land Use Score - Zone 1B		0	0	0	0
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	NO	0	0	0	
Sources of Class II or III leachable contaminants or	NO	0	0	0	
Land Use Zone II Greater Than 50% Irrigated Agricultural Land		2	2	2	
Potential Contaminant Source / Land Use Score - Zone II		2	2	2	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	YES	1	1	1	
Sources of Class II or III leachable contaminants or	YES	1	1	1	
Is there irrigated agricultural lands that occupy > 50% of	NO	0	0	0	
Total Potential Contaminant Source / Land Use Score - Zone III		2	2	2	0
Cumulative Potential Contaminant / Land Use Score		4	4	4	0
4. Final Susceptibility Source Score		10	10	10	9
5. Final Well Ranking		Moderate	Moderate	Moderate	Moderate

## 1. System Construction

SCORE

Drill Date	Early 1920's	
Driller Log Available	NO	
Sanitary Survey (if yes, indicate date of last survey)	YES	2000
Well meets IDWR construction standards	N/A	1
Wellhead and surface seal maintained	YES	0
Casing and annular seal extend to low permeability unit	NO	2
Highest production 100 feet below static water level	N/A	1
Well located outside the 100 year flood plain	YES	0

Total System Construction Score 4

## 2. Hydrologic Sensitivity

Soils are poorly to moderately drained	NO	2
Vadose zone composed of gravel, fractured rock or unknown	YES	1
Depth to first water > 300 feet	NO	1
Aquitard present with > 50 feet cumulative thickness	NO	2

Total Hydrologic Score 6

## 3. Potential Contaminant / Land Use - ZONE 1A

IOC Score VOC Score SOC Score Microbial Score

Land Use Zone 1A	URBAN/COMMERCIAL	2	2	2	2
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO

Total Potential Contaminant Source/Land Use Score - Zone 1A 2 2 2 2

## Potential Contaminant / Land Use - ZONE 1B

Contaminant sources present (Number of Sources)	YES	1	1	1	0
(Score = # Sources X 2 ) 8 Points Maximum		2	2	2	0
Sources of Class II or III leachable contaminants or	YES	1	1	1	
4 Points Maximum		1	1	1	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B Less Than 25% Agricultural Land		0	0	0	0

Total Potential Contaminant Source / Land Use Score - Zone 1B 3 3 3 0

## Potential Contaminant / Land Use - ZONE II

Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leachable contaminants or	YES	1	1	1	
Land Use Zone II Less than 25% Agricultural Land		0	0	0	

Potential Contaminant Source / Land Use Score - Zone II 3 3 3 0

## Potential Contaminant / Land Use - ZONE III

Contaminant Source Present	YES	1	1	1	
Sources of Class II or III leachable contaminants or	YES	1	1	1	
Is there irrigated agricultural lands that occupy > 50% of	NO	0	0	0	

Total Potential Contaminant Source / Land Use Score - Zone III 2 2 2 0

Cumulative Potential Contaminant / Land Use Score 10 10 10 2

## 4. Final Susceptibility Source Score

12 12 12 11

## 5. Final Well Ranking

Moderate Moderate Moderate Moderate



1. System Construction		SCORE			
Drill Date	3/4/86				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES	2000			
Well meets IDWR construction standards	YES	0			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		3			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	IRRIGATED CROPLAND	2	2	2	2
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		2	2	2	2
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	NO	0	0	0	0
(Score = # Sources X 2 ) 8 Points Maximum		0	0	0	0
Sources of Class II or III leachable contaminants or	NO	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		4	4	4	4
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	NO	0	0	0	
Sources of Class II or III leachable contaminants or	NO	0	0	0	
Land Use Zone II 25 to 50% Irrigated Agricultural Land		1	1	1	
Potential Contaminant Source / Land Use Score - Zone II		1	1	1	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leachable contaminants or	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of	YES	1	1	1	
Total Potential Contaminant Source / Land Use Score - Zone III		1	1	1	0
Cumulative Potential Contaminant / Land Use Score		8	8	8	6
4. Final Susceptibility Source Score		11	11	11	11
5. Final Well Ranking		Moderate	Moderate	Moderate	Moderate

1. System Construction		SCORE			
Drill Date	04/21/1999				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES	2000			
Well meets IDWR construction standards	YES	0			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		3			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	OTHER	0	0	0	0
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		0	0	0	0
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	NO	0	0	0	0
(Score = # Sources X 2 ) 8 Points Maximum		0	0	0	0
Sources of Class II or III leachable contaminants or	NO	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B Greater Than 50% Irrigated Agricultural Land		4	4	4	4
Total Potential Contaminant Source / Land Use Score - Zone 1B		4	4	4	4
Potential Contaminant / Land Use - ZONE II					
Contaminant Sources Present	NO	0	0	0	
Sources of Class II or III leachable contaminants or	NO	0	0	0	
Land Use Zone II Greater Than 50% Irrigated Agricultural Land		2	2	2	
Potential Contaminant Source / Land Use Score - Zone II		2	2	2	0
Potential Contaminant / Land Use - ZONE III					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leachable contaminants or	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of	YES	1	1	1	
Total Potential Contaminant Source / Land Use Score - Zone III		1	1	1	0
Cumulative Potential Contaminant / Land Use Score		7	7	7	4
4. Final Susceptibility Source Score		10	10	10	11
5. Final Well Ranking		Moderate	Moderate	Moderate	Moderate

## POTENTIAL CONTAMINANT INVENTORY

### LIST OF ACRONYMS AND DEFINITIONS

**AST (Aboveground Storage Tanks)** – Sites with aboveground storage tanks.

**Business Mailing List** – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

**CERCLIS** – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as **ASuperfund** is designed to clean up hazardous waste sites that are on the national priority list (NPL).

**Cyanide Site** – DEQ permitted and known historical sites/facilities using cyanide.

**Dairy** – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

**Deep Injection Well** – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

**Enhanced Inventory** – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

**Floodplain** – This is a coverage of the 100year floodplains.

**Group 1 Sites** – These are sites that show elevated levels of contaminants and are not within the priority one areas.

**Inorganic Priority Area** – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

**Landfill** – Areas of open and closed municipal and non-municipal landfills.

**LUST (Leaking Underground Storage Tank)** – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

**Mines and Quarries** – Mines and quarries permitted through the Idaho Department of Lands.)

**Nitrate Priority Area** – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

**NPDES (National Pollutant Discharge Elimination System)** – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

**Organic Priority Areas** – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

**Recharge Point** – This includes active, proposed, and possible recharge sites on the Snake River Plain.

**RICRIS** – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

**SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities)** – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

**Toxic Release Inventory (TRI)** – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

**UST (Underground Storage Tank)** – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

**Wastewater Land Applications Sites** – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

**Wellheads** – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

**NOTE:** Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.